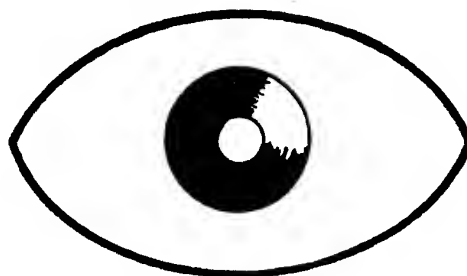
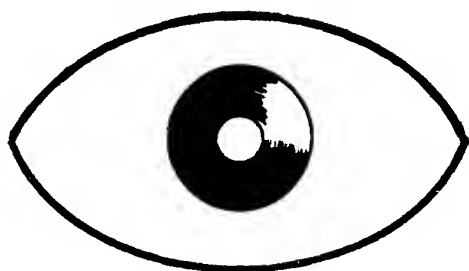


ROCK-OLA

MODEL G-206

EYES



**SERVICE MANUAL**

**AND  
PARTS CATALOG**

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### INTRODUCTION

#### HOW TO OPERATE EYES

Eyes is an exciting game which consists of 8 fields. The player must control his eye by skillful use of a 4 way joystick. The player must avoid shots from enemy eyes and shoot all bonus objects in the maze.

The best strategy is to follow a zig zag path through the maze to avoid being shot and shoot bonus objects as quickly as possible.

Each time a player is successful in shooting all bonus objects, a new set of bonus objects appear.

The field number is displayed in red in the center of the screen.

MAZE #	ENEMY EYE	BONUS OBJECT
1	100	500
2	200	1000
3	300	1500
4	400	2000
5	500	2500
6	600	3000
7	700	3500
8	800	4000

The player must score a minimum of 50 points per second to stay alive. A bonus eye is awarded at operator selected score levels of 50,000, 75,000, 100,000, or 125,000 points.

The player may earn up to 4 bonus eyes per game.

## RECEIVING AND INSTALLATION (VIDEO GAMES)

### RECEIVING INSPECTION

Your game was shipped in ready-to-play condition. However, after removal of the shipping carton, a brief visual examination is suggested.

Naturally, you'll want to make note of any physical damage to the game cabinet and its external components for freight claim purposes. Considering the quality of the shipping carton, any damage to the exterior would indicate possible interior damage as well.

The interior of the game should also undergo a brief examination for: loose mounting hardware (check to be sure that the major components are still securely mounted); disconnected or loose wires, cables or harnesses; electronic devices loose in their sockets; etc.

At this time the game serial number should be logged. Please remember that the game serial number will be required if you need service from your distributor.

### ELECTRICAL REQUIREMENTS

A good earth ground is essential for the proper operation of this game or for that matter any electronic device. Problems with instability and erratic operation of computer-type devices can usually be traced to an ineffective ground system. Therefore, plug the game into a properly wired 3 prong outlet. If a 3 prong to 2 prong AC adaptor must be used, an alternate method of grounding the third prong must be used.

### INITIAL ADJUSTMENTS

When the game is connected to AC power, one of the game sounds may be heard. This is normal.

The audio level (volume) can be easily adjusted. This is achieved by rotation of the volume control located on the coin door. The audio level should compete with other machines "on the floor" to maximize play time.

### OPERATOR OPTIONS

The option switches allow you to select how many credits per coin, how many chances to play per game & bonus scoring. If your machine DOES NOT have multiple pricing capability, refer to page 2-2. If it DOES have multiple pricing capability, skip 2-2 and refer to page 2-3.

**CREDIT BUTTON.** When you push this button you can increase credits without affecting the counter. It's the red button on the coin door.

### WARNING

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. As temporarily permitted by regulation it has not been tested for compliance pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

**EYES OPTION SWITCHES**  
(LOCATED ON GAME BOARD)

CHANGE OF DIP SWITCH								
DESCRIPTION	8P. DIP SWITCH POSITION (DS1)							
COINAGE	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
1 COIN / 1 PLAY	OFF	OFF						
1 COIN / 2 PLAYS	ON	OFF						
2 COINS / 1 PLAY	OFF	ON						
FREE PLAY	ON	ON						
"EYES" PER GAME			SW3	SW4				
2			OFF	OFF				
3			ON	OFF				
4			OFF	ON				
5			ON	ON				
BONUS "EYES" SCORE					SW5	SW6		
50,000					OFF	OFF		
75,000					ON	OFF		
100,000					OFF	ON		
125,000					ON	ON		
FOUR (4) EYES PER GAME MAXIMUM								
DIAGNOSTICS							SW7	
							ON	
FREEZE IMAGE								SW8
								ON

**NORMAL SETTING:** 3 EYES PER PLAYER  
1ST BONUS EYE AT 75,000 POINTS  
1 COIN / 1 PLAY

TURN OFF POWER TO GAME BEFORE CHANGING SWITCH POSITIONS  
NEW SWITCH POSITIONS BECOME EFFECTIVE ON POWER UP

## GENERAL INFORMATION AND PERIODIC MAINTENANCE

Your video game contains the same basic building blocks as any other video game.

THE POWER SUPPLY provides all the necessary voltages for the Logic, audio section, monitor and fluorescent light. Always unplug the game before replacing a fuse.

THE LOGIC P.C. BOARD OR BOARDS is the "brain" of the game. It senses when a coin is dropped in the coin meter, and gives credit. It then reads what is happening at the operator controls, interprets and computes to make the game play according to the Joystick Rotary Control or the buttons a player pushes. It tells the monitor what to draw on the screen. It tells the audio section when to make appropriate sound effects.

THE AUDIO OR SOUND P.C. BOARD generates all the sound effects for the game and powers the loudspeaker.

THE MONITOR is the picture tube. It draws pictures on the tube screen according to the instructions it receives from the Logic P.C.B. The Picture Tube (CRT) may be a "Vector" type in black & white. It may also be a "Raster" type in color.

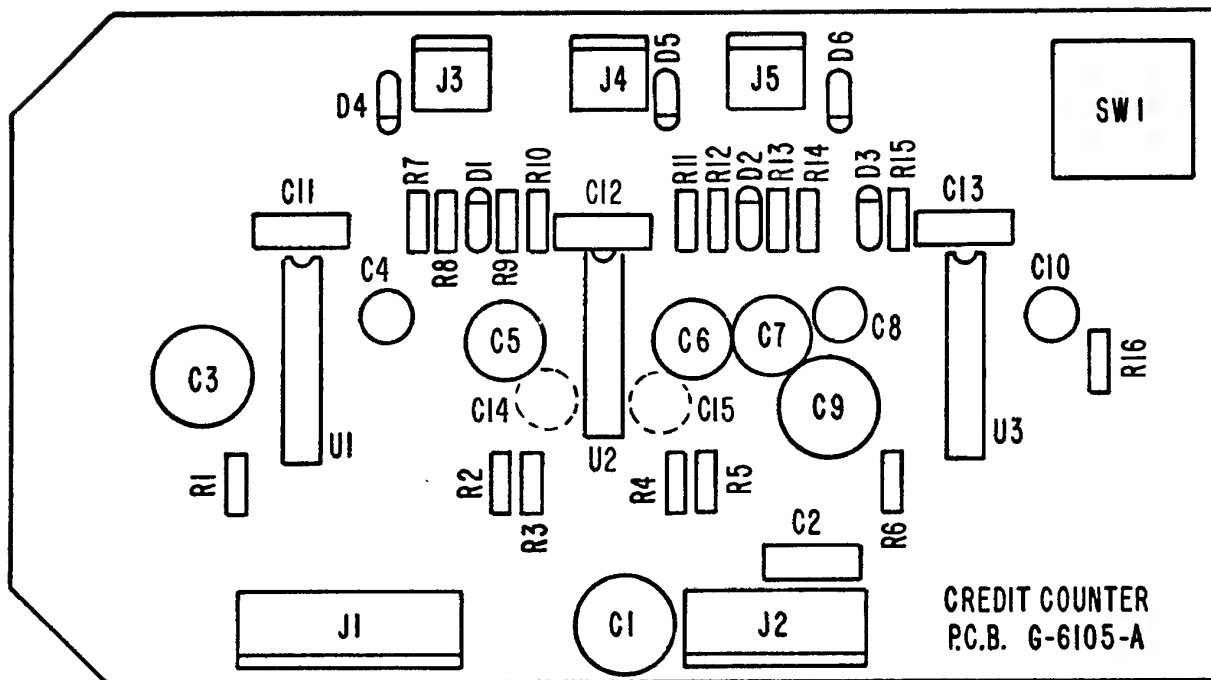
THE MAIN WIRING HARNESS carries power from the power supply to the Logic, audio section and monitor. It connects to each section through the Molex plugs. NEVER CONNECT OR DISCONNECT THE MOLEX POWER PLUGS UNLESS THE GAME IS UNPLUGGED.

THE RIBBON CONNECTORS carry data to and from the Logic P.C.B. Care must be taken to plug in correctly. Red Stripe on ribbon cable indicates Pin 1 and must be connected to Pin 1 on each end. Plugs may also be color coded with red dots.

PERIODIC MAINTENANCE - The only Periodic Maintenance required is an occasional cleaning. The very high voltage used on the picture tube attracts dust that gradually degrades picture quality. To clean: unplug game and let sit for at least 5 minutes to let voltages "bleed-off".

To clean the face of the picture tube and associated plastic parts, remove the control panel by loosening clamps on each side of panel on inside of cabinet. These clamps are accessible thru coin door. Remove the plexiglas window being careful not to scratch clear or painted areas. Window, Gray Filter (Color Monitor), Colored Overlay (Black & White Monitor) and Picture Tube may now be cleaned with a mild solution of dish detergent. Dry all parts with a soft cloth and reassemble.

NOTE: Monitor may be pivoted down for cleaning by removing two wing nuts and carriage bolts from rear holes of Mounting Brackets.



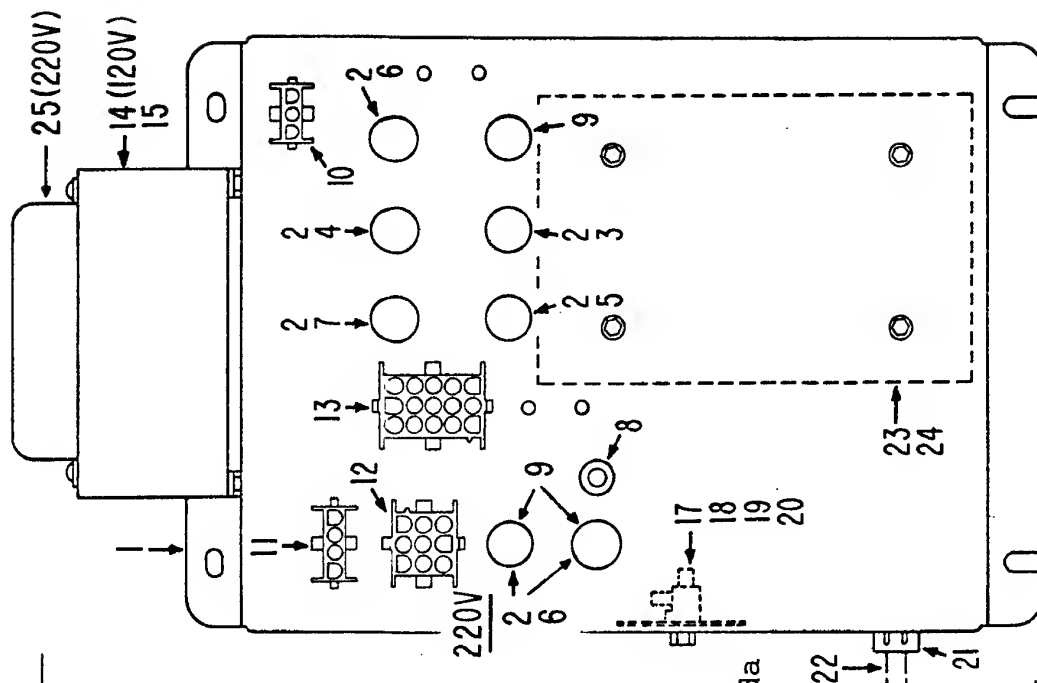
CREDIT COUNTER P.C. BOARD ASSEMBLY  
G-6105-A

ITEM NO.	PART NO.	DESCRIPTION	REF. DES.	MFGR. PART NO.
1	G-0812	Rectifier	D1, D2, D3, D4, D5, D6	IN4003
2	51289	Resistor 1/4W 5%	R2, R9, R12, R14	100 OHM
3	51564	Resistor 1/4W 5%	R3, R4, R5, R8, R10, R11, R13, R15	1K OHM
4	49269	Resistor 1/4W 5%	R1, R6	27K OHM
5	49268	Resistor 1/4W 5%	R7, R16	33K OHM
6	49146	Capacitor, Tantalum 25V	C4, C5, C6, C7, C10	2.2 MFD
7	53339	Capacitor, Tantalum 15V	C3, C9	4.7 MFD
8	52561	Capacitor, Tantalum 15V	C8	10 MFD
9	51988	Capacitor, Electrolytic 25V	C1	47 MFD
10	33762	Capacitor, Disc 1000V	C2	470 MMFD
11	53299	Capacitor, Monolythic 50V	C11, C12, C13	.1 MFD
12	52720	14 Contact Solder Dip Socket	U2	
13	52724	16 Contact Solder Dip Socket	U1, U3	
14	G-5136	2 Circuit Pin Header	J3, J4, J5	
15	G-5137	5 Circuit Pin Header	J2	
16	G-5459	6 Circuit Pin Header	J1	
17	G-6116	Quad 2-Input Nand Gate	U1	74LS03
18	G-6058	Dual Monostable Multivibrator	U1, U3	74221
19	52725-2	Key Switch - Single Contact - Red	SW1	
20	G-6106	Credit Counter P.C. Board		
21	G-0940	Capacitor, Ceramic Disc 50V	C14	.001 MFD
22	G-0940	Capacitor, Ceramic Disc 50V	C15	.001 MFD

# POWER SUPPLY ASSEMBLY

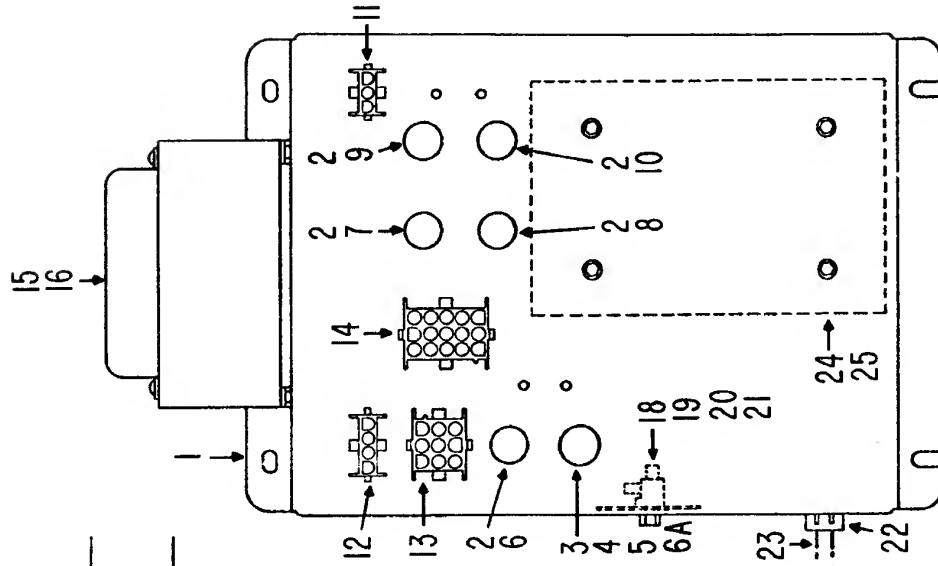
G-6415-A

ITEM NO.	PART NO.	DESCRIPTION
1	G-6417-A	Power Supply Chassis Weld Assembly
2	49250	Shock Safe Fuseholder
3	ST-10703	0.5 Amp 250V Slo-Blo Fuse (F6)
4	ST-4323	0.8 Amp 250V Slo-Blo Fuse (F5)
5	ST-4332	1 Amp 250V Slo-Blo Fuse (F4)
6	ST-4367	1.5 Amp 250V Slo-Blo Fuse (F7)
7	ST-9631	5 Amp 250V Slo-Blo Fuse (F3)
8	G-6412	1.5 Amp Circuit Breaker
9	ST-9843	Tapered Caplug #5 - Red
10	ST-10589	3 Circuit Universal Socket Housing
11	ST-10588	4 Circuit Universal Socket Housing
12	ST-10570	9 Circuit Universal Socket Housing
13	ST-10500	15 Circuit Universal Socket Housing
14	G-6418-A	Power Transformer Assembly (120V)
15	ST-8722	10-32 Hex Flg Whiz-Lock Nut
16	ST-10062	8-36 X 5/16 M.S. Brass - Green Iridite
17	49007	Input Terminal Insulator
18	47827	3 Pole Input Terminal
19	ST-4518	6-32 X 1/2 Mach. Screw
20	ST-8715	6-32 Nut, Hex Flange - Serrated
21	ST-10762	Universal Strain Relief
22	G-5357	3 Conductor Cord & Plug - Domestic, Canada
	G-5377	3 Conductor Cord & Plug - Australia
	G-5378-A	3 Conductor Cord & Plug - England
	G-5376	Cordset - Germany, Belgium, France
23	G-6062-A	Switching Regulator MC014A
24	ST-8267	8-32 X 1/4 Tapping Screw
25	G-6059-1A	Power Transformer Assembly (220V) (Export only)



# POWER SUPPLY ASSEMBLY

G-6060-A



ITEM NO.	PART NO.	DESCRIPTION
1	G-6063-A	Power Supply Chassis Weld Assembly
	G-6071-A	Power Supply Chassis Weld Assembly Canada only
2	49250	Shock Safe Fuseholder
3	G-5403-A	Fuseholder Assembly - Canada only
4	44935	Snap-in Steel Clip - Canada only
5	ST-9843	Tapered Caplug #5 - Red
6	ST-3090	3 Amp 250V Slo-Blo Fuse
6A	44930	Fusetron GMQ 3.2A Fuse (F1) Canada only
7	ST-9631	5 Amp 250V Slo-Blo Fuse
8	ST-4332	1 Amp 250V Slo-Blo Fuse
9	ST-4323	0.8 Amp 250V Slo-Blo Fuse
10	ST-10703	0.5 Amp 250V Slo-Blo Fuse
11	ST-10589	3 Circuit Universal Socket Housing
12	ST-10588	4 Circuit Universal Socket Housing
13	ST-10570	9 Circuit Universal Socket Housing
14	ST-10500	15 Circuit Universal Socket Housing
15	G-6059-A	Power Transformer Assembly
	G-6059-CA	Power Transformer Assembly Canada only
16	ST-8722	10-32 Hex Flg Whiz-Lock Nut
17	ST-10062	8-36 X 5/16 M.S. Brass - Green Iridite
18	49007	Input Terminal Insulator
19	47827	3 Pole Input Terminal
20	ST-4518	6-32 X 1/2 Mach. Screw
21	ST-8715	6-32 Nut, Hex Flange - Serrated
22	ST-10762	Universal Strain Relief
23	G-5357	3 Conductor Cord & Plug - Domestic, Canada
	G-5377	3 Conductor Cord & Plug - Australia
	G-5378-A	3 Conductor Cord & Plug - England
	G-5376	Cordset - Germany, Belgium, France
24	G-6062-A	Switching Regulator MC014A
25	ST-8267	8-32 X 1/4 Tapping Screw



"EYES" PART LIST (G-206)

OVERALL ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION
1	G-6375-A	Cabinet Assembly
2	G-6380-A	Control Panel Assembly
3	G-6100-1A	Monitor Assembly - Complete
4	G-6390-A	Game P.C.B. (Complete) (Eyes)
5	G-6060-A	Power Supply (Complete) Domestic
6	G-6415-A	Power Supply - Complete - Domestic (Alternate)
7	G-6377-1	Service Manual & Parts Cataloge
8	G-6378	Schematic - Eyes

CABINET ASSEMBLY - EYES

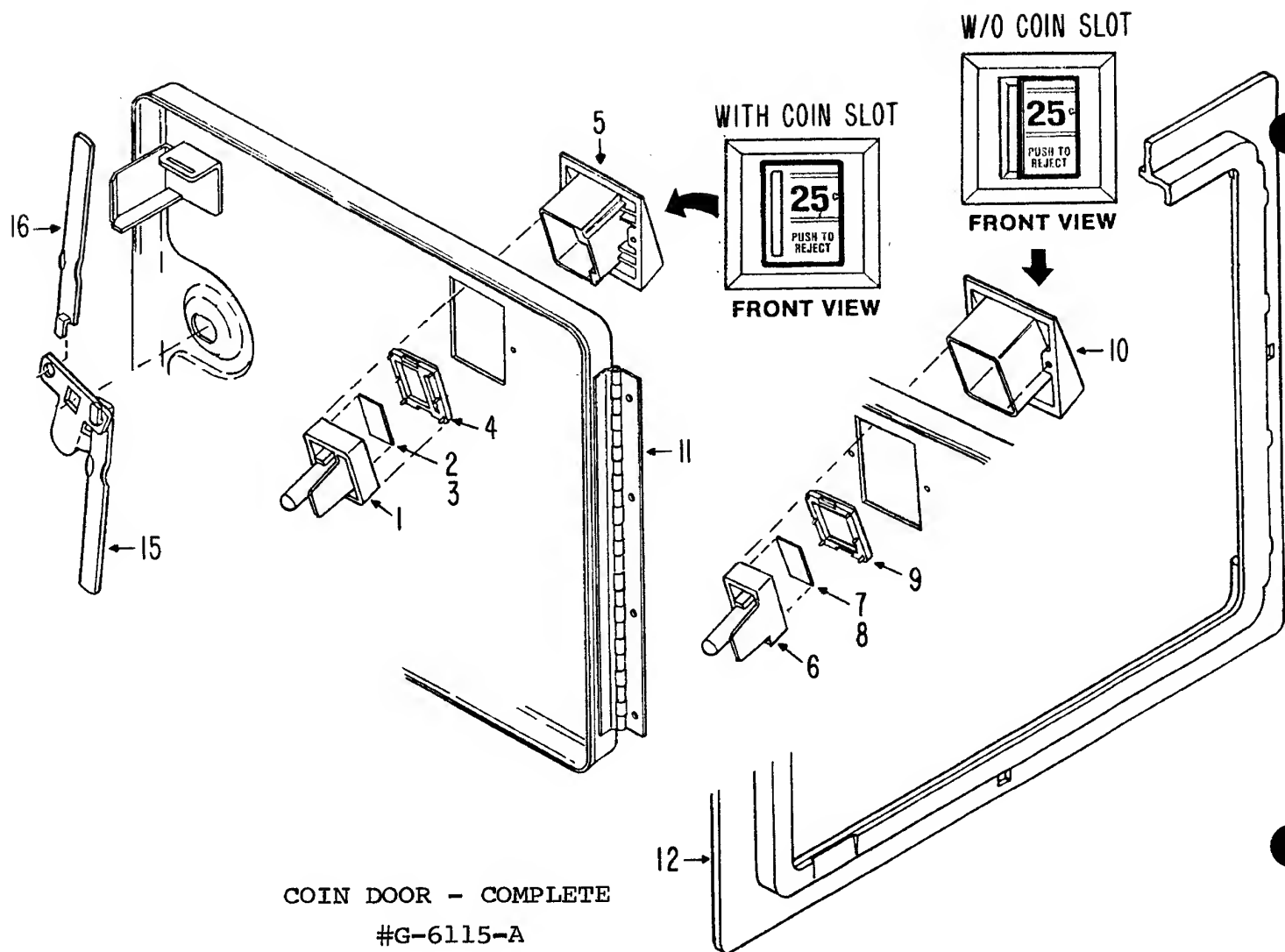
G-6375-A

1	G-24530-A	Cabinet - Wood
2	G-6115-A	Coin Door - Complete - Canada & Domestic
	G-6115-AA	Coin Door - Complete - Australia
	G-6115-BA	Coin Door - Complete - Belgium
	G-6115-FA	Coin Door - Complete - France
	G-6115-GA	Coin Door - Complete - Germany
	G-6115-JA	Coin Door - Complete - Japan
3	G-6108-A	Counter #1 - Complete (Single Price)
4	G-5419-A	Counter Assembly Only
5	G-6072-A	Coin Switch Cable
6	G-5092-A	Braided Shield - Short
7	G-5693	Bracket - Volume Control
8	G-5694	Potentiometer ( <u>Small</u> )
9	G-5664	Pointer Knob
10	G-5454	Bracket - Volume Control
11	G-5422	Potentiometer ( <u>Large</u> )
12	33463	Pointer Knob
13	G-6105-A	Credit Counter P.C.B. Only (w/o Brkt)
14	ST-10539	Circuit Board Support (5/8")
15	ST-3340-D	10-24 X 1 1/4 Carriage Bolt - Blk Ox
16	ST-4813	.203 I.D. X 1/2 O.D. X .032 Fl. Washer - Z.P.
17	ST-8724-D	10-24 Hex Flg Whiz Lock Nut - Blk Ox
18	G-5282	Speaker Grille - Blk
19	G-5022	Speaker - 6 X 9
20	G-5199	Mounting Rail - 19" (Color - Vertical)
21	ST-1443-D	1/4-20 X 1 1/4 Carriage Bolt - Blk Ox
22	ST-301	1/4 Int. Lock Washer
23	ST-1376	1/4-20 Wingnut
24	G-6060-A	Power Supply - 120V
25	G-6415-A	Power Supply - 120V (Alternate)
		Note Suffixes -CA Canada, -EA England,
		-AA Australia, -GA Germany, Belgium, France
26	G-5671	Mounting Bracket - Cash Box
27	ST-3363-D	10-24 X 1 1/8 Carriage Bolt - Blk Ox.
28	G-5683-A	Cash Box & Cover - Complete
29	G-5678-A	Cash Box (w/o Cover)
30	G-5682-A	Cover & Hinge Assembly Only
31	G-5439	Retainer - P.C.B. (Runner - R.H. Top)
32	ST-9741	8 X 1/2 Hex Flg (Type A) Z.P.
33	G-6100-1A	Monitor - 19" Raster - Complete (w/Guard & Cable)
34	G-6101-1A	Monitor - 19" (Monitor only) Vert. WG #4951F
35	G-5428-A	Monitor Power Cable Assy
36	G-5638	Guard - CRT

## CABINET ASSEMBLY - "EYES"

G-6375-A

ITEM NO.	PART NO.	DESCRIPTION
37	G-24073	Monitor Platform Rail (Wood)
38	G-5441	End Mounting Bracket
39	ST-10904	10-32 X 1 Hex Flg Swageform - Z.P.
40	ST-3340-D	10-24 X 1 1/4 Carriage Bolt - Blk Ox
41	ST-3139	.203 I.D. X 5/8 O.D. X .031 Fl. Wshr - Z.P.
42	ST-8724-D	10-24 Hex Flg Whiz Lock Nut - Blk Ox
43	G-0831	Bezel - CRT (Blk)
44	G-5436	CRT Filter - Gray
45	G-5413-A	Light Assembly - 120V
	G-5414-A	Light Assembly - 220/240V
46	ST-3341-D	8-32 X 1 Carriage Bolt - Blk Ox
47	ST-8721	8-32 Hex Flg Whiz Lock Nut - Z.P.
48	49557	Ballast Plate
49	49554-2	Ballast Insulator
50	11556	14-15-20 Watt Starter (FS-2)
	49301	Insulated Starter 20 Watt 220/240V
51	G-5043	Fluorescent Lamp (F15T12) CW 15 Watt
52	G-6372	Top Window - Eyes
53	G-5254	Retainer - Inner Top (Blk)
54	G-6304	Retainer - Top (Blk)
55	ST-10753-D	8 X 5/8 Pan Hd. Box Dr. (Type A) Blk Ox
56	G-5342	Clamp Fastener (Cabinet)
57	G-6380-A	Control Panel - Eyes - Complete
58	G-6371	Control Panel - Screened - Eyes
59	G-0623	Switch & Mtg. Assembly
60	G-0624	Button Assembly - Long
61	G-5341	Control Panel Clip
62	G-5431-1A	Joystick Assembly - 4 Way
	G-5492	Ball & Shaft
	G-5493	Cam (4 Way) - Small
	G-5496	Molded Bladeswitch (Joystick)
63	G-5433	Cover Plate - Joystick - Blue
64	G-5429-A	Control Panel Cable Assy
65	G-5469	Retainer - Front (Blk)
66	G-5252	Retainer - Center (Blk)
67	G-5249	Retainer - Rear
68	G-5247	CRT Window - Vertical (Blue)
69	G-5031-2	Price Card - 25¢
	G-5032-1	Price Card - Germany
	G-5033-1	Price Card - Belgium
	G-5034-1	Price Card - France
	G-5037-1	Price Card - England
70	G-6155-A	On/Off Interlock Sw. Cable Assembly (Includes Two Switches) -A (Canada and Domestic - 120V) White Plug -EA (England - 240V) Green Plug -GA (Germ - Belg - France - 220V) Blue Plug
71	V-22637	Switch - Cheat Interlock
72	49240	DPST Rocker Switch (On/Off)
73	G-5409-A	Braided Shield Assembly
74	G-6376-A	Main Cable Assembly (Cab)
75	G-5257-A	Back Door Assembly - Complete
76	G-24085-A	Back Door Assembly - (Wood Only)
77	G-5126	Lock Bracket
78	ST-10760	Lock, Cam Bolts & Keys
79	G-6395-A	Game P.C.B. (Complete) Eyes



ITEM NO.	PART NO.	DESCRIPTION
		Coin Return Button ( <u>with</u> Coin Slot)
1	G-6102	Coin Return Button (Red)
2	G-6088	25¢ Price Decal
3	G-6089	Token Decal
4	G-6103	Coin Return Button Cover (Red)
5	G-6104	Coin Button Housing
		Coin Return Button (w/o Coin Slot)
6	G-6111	Coin Return Button (Ornage)
7	G-6088	25¢ Price Decal
8	G-6089	Token Decal
9	G-6112	Coin Return Button Cover (Orange)
10	G-6113	Coin Button Housing
		COMMON PARTS
11	G-6241	Coin Door (includes Hinge) - 2 Coin
12	G-6242	Door Frame (Die Cast)
13	G-6243	Switch
14	G-6246	25¢ Acceptor (5301-10)
15	G-6247	Pivot Arm
16	G-6248	Locking Arm (2)

## EYES GAME P.C. BOARD ASSEMBLY

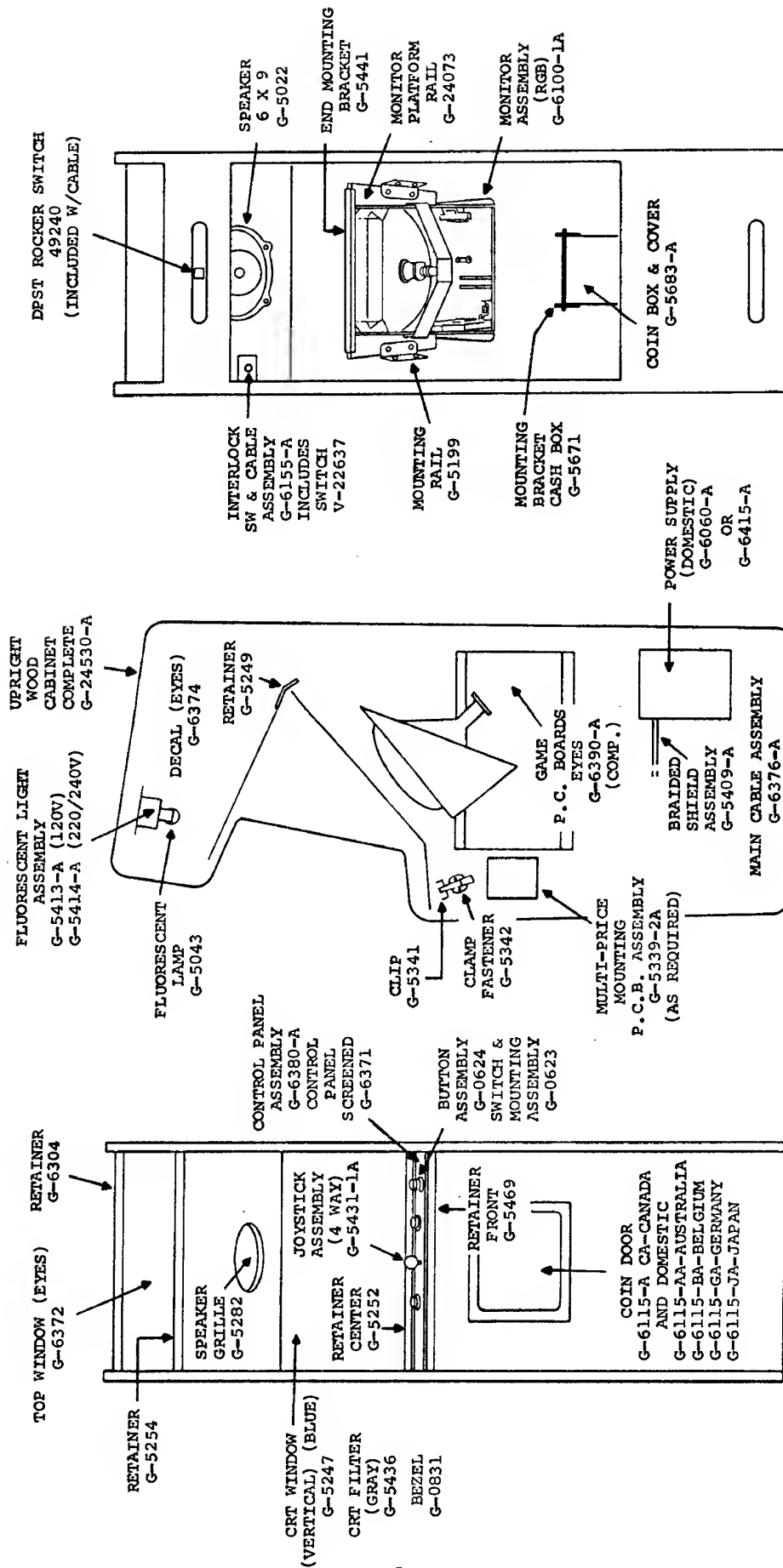
G-6390-A

ITEM NO.	PART NO.	DESCRIPTION	COORDINATE REF. DES.	MFGR. PART NO.
1	G-6014	Hex Buffer 4 Bit & 2 Bit	1B, 5M, 7K, 7L, 9E, 9F, 9L, 9M	74LS367
2	G-0683	Quad 2-Input Or Gate	1C, 8A	74LS32
3	G-6008	Synchronous 4 Bit B.C.	1D, 2D, 2N, 2P, 3N, 3P, 9E	74LS161
4	G-6013	4 Bit Adder	1E, 1H, 2E	74LS283
5	G-6009	Hex D-Type Flip Flop W/R	1F, 1J	74LS174
6	G-0707-03	DROM	1K	6301-1J
7	G-6020	Quad Analog Switch	1L	4066
8	G-0677	Nand Gate	2A	74LS00
9	G-6010	Quad D Type Flip Flop W/R	2B	74LS175
10	G-6368	1K X 4 CMOS Ram	2C	6148
11	G-0686	Quad 2-Input Exclusive Or	2F, 4E	74LS86
12	G-6381	16 X 4 Bit Read/Write Memory	2H, 2J, 3E, 3F	7489
13	G-6012	Octal D-Type Flip Flop W/R	2K, 4C	74LS273
14	G-0678	Quad 2-Input Nand Gate	2M, 5L, 8M	74LS02
15	G-6397	Quad 2-Input Multiplexer	3A, 3H	74LS158
16	G-0689	Quad Data Selector	3B, 3J, 4D, 5A	74LS157
17	G-6273	Dual 4 Input Nand Gate	3D	74LS20
18	G-0707-04	DROM	3K	6301-1J
19	53706	Dual D Latch	3L, 5K, 9D	74LS74
20	G-0681	Triple 3-Input Nand Gate	3M	74LS10
21	G-0707-05	DROM	4A	6301-1J
22	G-0696	Octal D Flip Flop	4B	74LS377
23	G-6272	Octal Transceiver	4F	74LS245
24	G-6019	Ram	4H, 4J, 4K, 4L, 4M, 4N	2114
25	G-6006	Dual 1 of 4 Decoder	4P, 6K, 8C, 8D, 8N	74LS139
26	G-0692	4 Bit Shift Register	5B, 5BC	74LS194
27	G-0680	Quad 2-Input And Gate	5C, 7C, 8J	74LS08
28	G-6382-05	I.C. Game PROM	5D	2532
29	G-6382-06	I.C. Game PROM	5E	2532
30	G-6386	Quad 2-Input Multipl./Inv.	5N, 6L, 6N	74LS258
31	G-0693	Tri-state Quad	5P, 6M, 6P	74LS257
32	G-6229	Hex Schmitt Trigger	6A	74LS14
33	G-6397	Dual J-K Flip Flop	6B, 6C	74LS109
34	G-6388	8 Bit Latch D-Type	6D, 6DE, 6E	74LS373
35	54181	CPU	7A	Z-80 CPU
36	G-6382-01	I.C. Game PROM	7D	2532
37	G-6382-02	I.C. Game PROM	7E	2532
38	G-6382-03	I.C. Game PROM	7F	2532
39	G-6382-04	I.C. Game PROM	7H	2532
40	G-6002	BCD-To Decimal Decoder	7M	74LS42

## EYES GAME P.C. BOARD ASSEMBLY

G-6390-A

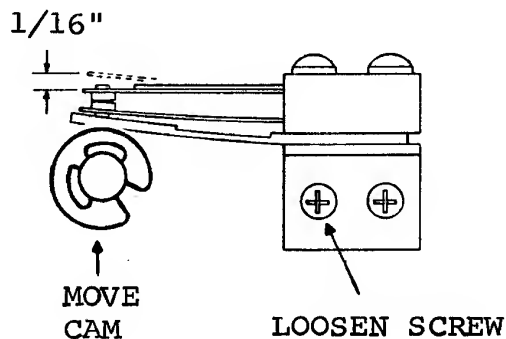
ITEM NO.	PART NO.	DESCRIPTION	COORDINATE REF. DES.	MFGR. PART NO.
41	G-0679	Hex Inverter	8B	74LS04
42	G-6005	1 of 8 Decoder/De-Plexer	8K	74LS138
43	G-0708-03	DROM	8H	6331
44	G-6015	Hex Buffer 4 Bit & 2 Bit	9B	74LS368
45	G-0687	Dual J-K Flip Flop	9C	74LS107
46	G-0694	8 Bit Latch	9N	74LS259
47	G-6021	Audio Amplifier	10B	MB3712
48	51304	Dip Switch Assembly (8 Cont.)	SW1	
49	G-6393	Transistor	TR1	C1815
50	G-6359	Transistor	TR2	C932
51	G-6277	Diode	D1, D2, D3	1588
52	G-6036	Crystal 18.432 MHz	X1	
53	G-6167	Trim Control 1K OHM		
54	51289	Resistor 1/4W 5%	R20	100 OHM
55	53888	Resistor 1/4W 5%	R25	180 OHM
56	53982	Resistor 1/4W 5%	R23, R26, R28, R32, R35, R49	220 OHM
57	52344	Resistor 1/4W 5%	R34, R52, R53	330 OHM
58	49264	Resistor 1/4W 5%	R22, R27	470 OHM
59	51564	Resistor 1/4W 5%	R1, R7, R10, R12, R13, R14, R15 (5KL), R17, R18, R19, R21, R24, R29, R33, R50, R51, R55	1K OHM
60	52358	Resistor 1/4W 5%	R9	2.2K OHM
61	51292	Resistor 1/4W 5%	R8, R11	4.7K OHM
62	51293	Resistor 1/4W 5%	R4, R30, R31, R15 (5-6A), R16	10K OHM
63	51291	Resistor 1/4W 5%	R2, R3, R54	22K OHM
64	51294	Resistor 1/4W 5%	R5	47K OHM
65	50966	Resistor 1/4W 5%	R6	100K OHM
66	G-6364	Resistor Pack 5 Pins	RA2, RA3, RA5	1K OHM X 4
67	53978	Resistor Pack 9 Pins	RA1, RA4, RA6, RA7, RA8, RA9	1K OHM X 8
68	53327	Capacitor, Disc	C3, C29	100 PF
69	G-6176	Capacitor, Disc	C2	470 PF
70	53994	Capacitor, Disc	C1	0.01 MFD
71	G-6137	Capacitor, Disc	C9, C11, C13, C14, C16 Thru C28, C31, C32, C33 & A11 CP	.1 MFD
72	G-6138	Capacitor, Tantalum	C12	1 MFD, 25V
73	G-6358	Capacitor, Electrolytic	C4, C15	10 MFD, 16V
74	G-6137	Capacitor, Electrolytic	C8, C10	47 MFD, 16V
75	G-6157	Capacitor, Electrolytic	C6, C7	470 MFD, 16V
76	G-6097	Capacitor, Electrolytic	C5	1000 MFD, 10V
77	52724	16 Contact Solder Dip Socket	1K, 3K, 8H	
78	52722	24 Contact Solder Dip Socket	5D, 5E, 7D, 7E, 7F, 7H	



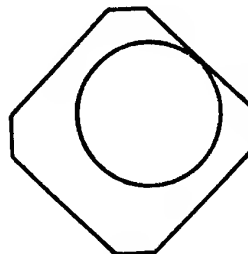
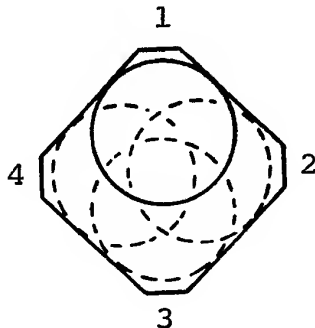
JOYSTICK SWITCH ADJUSTMENTS  
(4 WAY)

1. Adjust each individual switch as follows:
  - 1.1 Loosen front screw on switch bracket.
  - 1.2 Move cam as far as possible toward switch & hold in this position.
  - 1.3 Rotate switch toward cam until switch contacts close.
  - 1.4 Continue to rotate switch until top blade deflects approx.  $1/16"$  as shown below.
  - 1.5 Lock front screw on bracket.
2. After adjusting all four switches, move lever against side of square and check switch action -
  - 2.1 Switch #1 must break before switch #2 makes. No two switches can make contact at the same time or game action will be erratic.

MOVE SWITCH UNTIL  
CONTACTS MAKE -  
CONTINUE TO DEFLECT  
TOP BLADE  $1/16"$

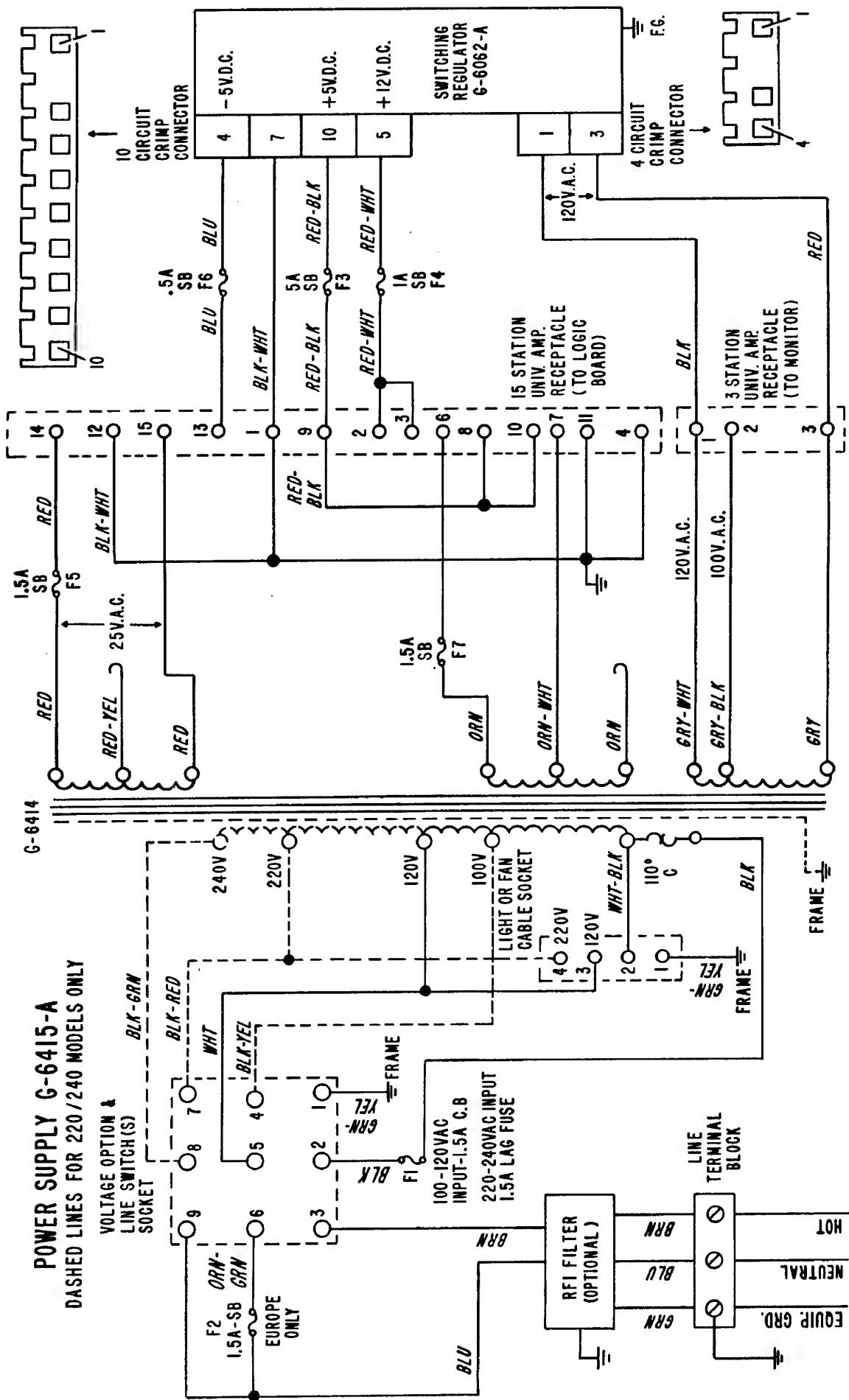


CHECK FOUR SWITCHES  
FOR CONTACT ADJUSTMENT



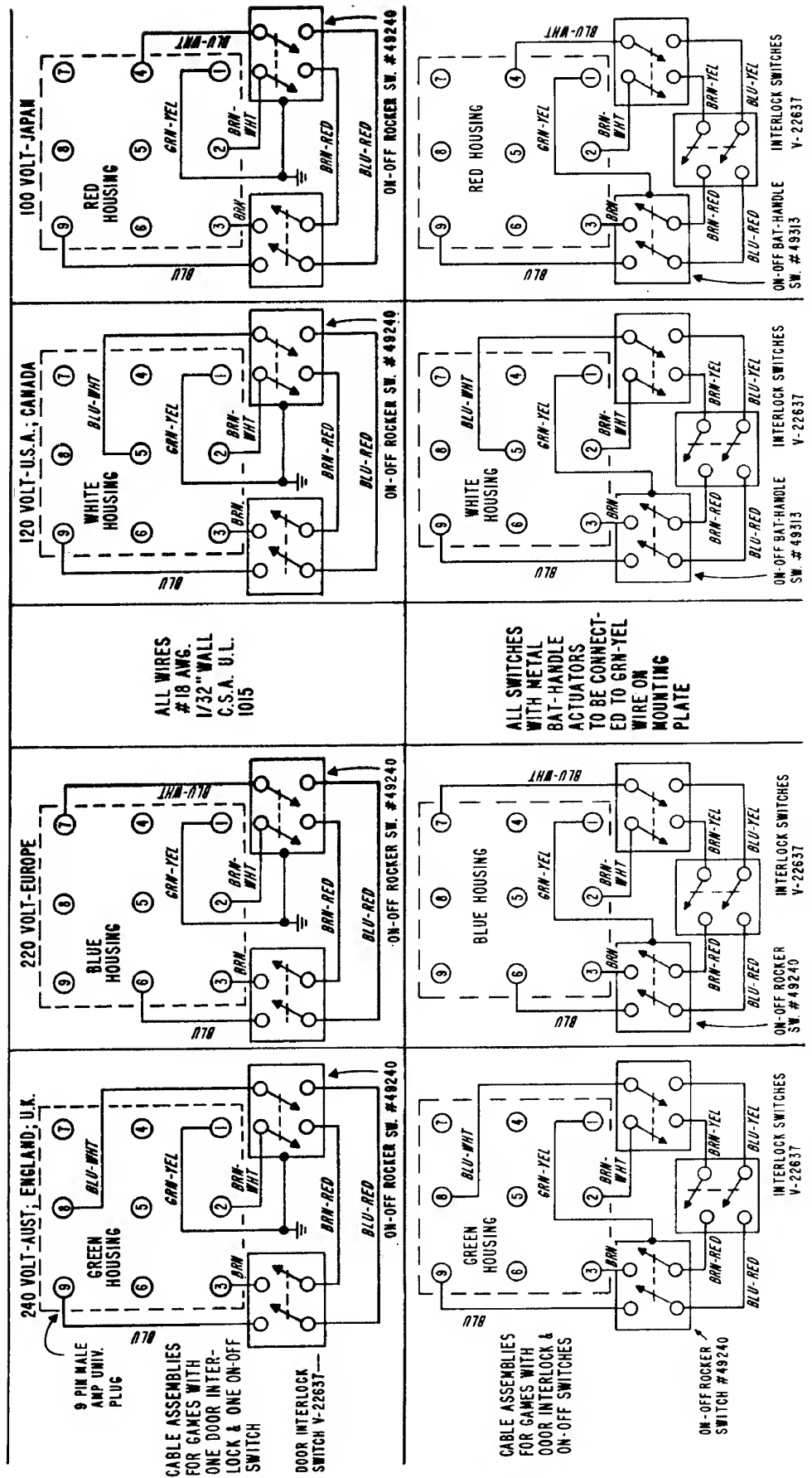
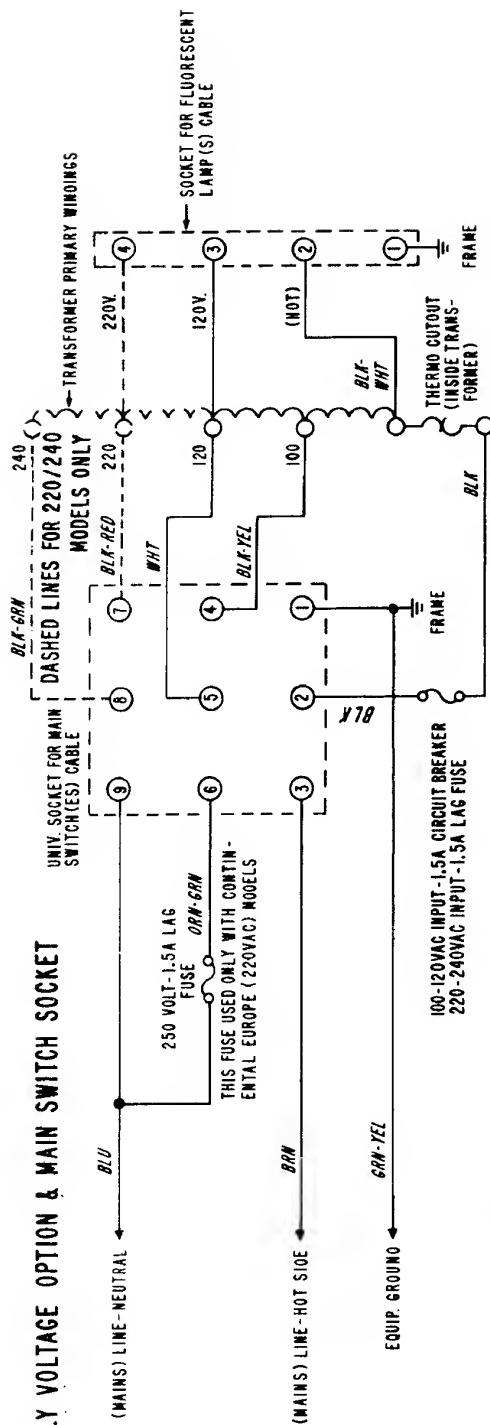
3. **IMPORTANT:** TIGHTEN ALL SCREWS on switch brackets to prevent any movement after adjusting.

# **POWER SUPPLY G-6415-A** **DASHED LINES FOR 220/240 MODELS ONLY**

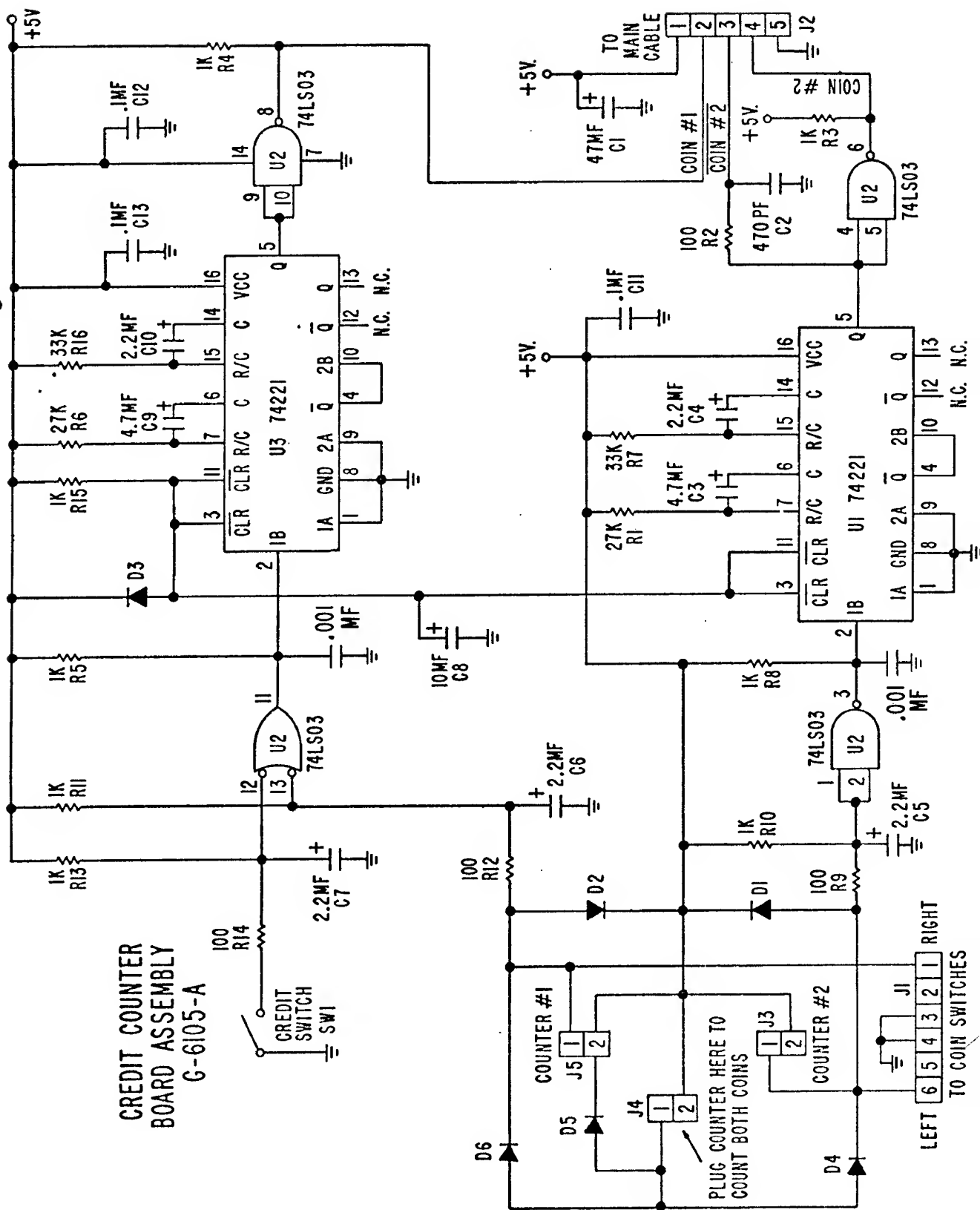




# POWER SUPPLY VOLTAGE OPTION & MAIN SWITCH SOCKET



# CREDIT COUNTER BOARD ASSEMBLY G-6105-A



1998

